

Lagging zones and trade reforms



Key Points

- The Lagging zones confront the highest rates of poverty and lack of access to basic services;
- Lagging Zones do not necessarily benefit from commercial reforms;
- The governments should consider the incorporation of complementary policies that procure to make that the benefits of international commerce be more inclusive.

National Work Group for Participation (NWGP) is a regional entity that procures initiatives for the relief of poverty, articulating public, private and civil society actors. Its range of action and vision is based on principles of solidarity, equity, social justice, sharing of training, powering and respect for plurality.

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1. Poverty and lagging zones

CEPAL's (2007) poverty figures for Latin America are shocking as about 36% of the population of the region (194 million of people) live in poverty, while approximately 70 million are affected by extreme poverty (13% of the population). Such poverty levels, that vary from country to country, affects even more critically families in the rural zones and remote areas than those households in the urban zones. In Bolivia, Guatemala, Honduras, Nicaragua, Paraguay and Peru, about 70% of the rural population live in poverty, while in Mexico, about 35% of the rural population live in poverty, much high above the 11% average of urban areas (Perry and Lederman, 2005). Not only are such high poverty figures disturbing in Latin America, but also the inequality in the distribution of income, which is one of the highest in the world (Ferranti, Perry, Ferreira and Walton, 2004).

In 2000, about 65 percent of the rural families had access to potable water, while almost 94 percent of the urban families counted with this access in 2000 (Perry and Lederman, 2005). Considering unfavourable situation in the lagging and rural zones of Latin America, and the commercial liberalization process which has been adopted by the majority of governments in the region, it can be noted that such liberalization process could have uneven effects on the wellbeing of urban and non urban populations. This article aims at systematize estimations made by different authors regarding the consequences that the processes of trade liberalization might have on the most impoverished population segments (generally households in rural and lagging zones) of the developing countries, in particular those of Latin America.

1. Lagging zones and trade

The studies that are mentioned below suggest that the lagging zones have not necessarily benefited from trade policy measures oriented

to increase international trade among countries. When trade openness takes place, through a trade liberalization for example, the terms of trade (relative prices of exports in relation to those of imports), and savings in foreign exchange tend to change. In the case of Bolivia, Barja, Monterrey and Villarroel (2004) investigated that between 1999 and 2002, rural poverty (measured by poverty gap and intensity of poverty) increased due to a reduction in savings and the deterioration of terms of trade.

The impacts of trade liberalization on lagging zones have been estimated for several regions of the world. Chen and Ravallion (2004), using a household survey in three Chinese provinces, simulated the impacts on wellbeing emerging from changes in the prices of goods and production factors (capital, land and labour) resulting from admission of China to the World Trade Organization (WTO). The results of such simulation indicated that the rural zones of these three provinces tend to lose, while the urban zones tend to gain. A strong reason that explains these results is that in the rural zones, where income depends on the sale of grains, the local prices of the grains tend to lower due to the trade liberalization resulting from the access to the WTO. It is interesting to notice that the description of the rural actors made by Chen *et al* coincides with the characteristics of the families that live in the lagging zones; i.e. poor families, economically vulnerable, dependent on agriculture, and with few links with more progressive regions. These families tend to lose between 3 and 5% of their income according with the estimates of these authors.

However, it is important to mention that the methods used in the simulations, as recognized by Chen *et al*, do not take into account the dynamic aspects of trade liberalization processes. That is to say, when countries eliminate their import and export tariffs, and harmonize their sanitary and phyto-sanitary measures (due to trade liberalization), it may happen as a result of

higher imports of technology an innovation process and learning of new technologies may be facilitated, which in turn, may increase productivity of labour and consequently increased remuneration in the medium and long term. This dynamic effect is not captured by the model used by these authors, which invites to consider their results as short term estimates.

Another interesting exercise that shows simulations emerging from trade liberalization on lagging zones in Nepal was developed by Cockburn (2001). Unlike to Chen's *et al* approach, Cockburn used a general equilibrium model where there is a "representative" individual (a person with an average income representing a given geographical region) upon which the effects of determined trade policies are simulated. This model simulated changes in sources of income and expenditure for each one of the 3000 individuals contained in the sample. The simulation consisted on a total elimination of import tariffs. Thus, this simulation was closer to an academic exercise since no country eliminates totally its tariffs, but it served for Cockburn's purposes to analyze the impact of such elimination on the livelihoods of households in Nepal. Cockburn *et al* concluded that the process of trade liberalization favours families living in urban zones, harming families in rural and mountain zones (typically families from lagging zones). This conclusion is congruent with the deficiencies in infrastructure, communication and productivity in the rural zones, resulting from several

years at civil war between Maoist insurgents and governmental forces.

In contrast with previous investigations that suggest that negative effects are produced for rural and poor segments as a consequence of trade liberalization processes, Ferreira Filho and Horridge (2005) suggest that as result of the implementation of the Doha Program for Development (DDP) in Brazil, the poorest segments of this country would see positive results, albeit little, that would emerge from such program. The methodology used by Ferreira Filho *et al*, consisted of a combination of a general equilibrium model (Orani-Australia) and a micro-simulation model that together simulated the effects of the adoption by Brazil of the agreements under the Doha Development Round. The general equilibrium model simulated the effects of such adoption over macroeconomic variables of Brazil (i.e. gross domestic product - GDP, exchange rate, terms of trade, exports and imports). These effects were fed into a micro-simulation model to estimate the effects on livelihoods of families contained in the sample (over one hundred thousand).

Macro results indicate that the GDP moderately increased; the real exchange rate increased (consequently an appreciation of the local Brazilian currency), with the corresponding improvement of the terms of trade; the levels of imports and exports varied moderately. At a micro level, their results suggest that in the labour market, some individuals from the manufacturing sector lose their jobs (particularly in the industrial states of Sao Paulo and Rio de Janeiro), while jobs in the agricultural sector, that generally concentrate non-qualified labour intensive sectors, increase. These estimates indicate that the implementation of the DDP would reduce the inequality and poverty in Brazil due to the fact that a significant percentage of the poor, (approximately 40%), depend on agricultural activities for their livelihoods which would experience a positive expansion.

An estimate for Bolivia (Lara and Soloaga, 2005) shows that as a result of the implementation of the DDP, households with larger incomes would experience an increase of about 1% in their consumption levels, except in the case of the poorer families (normally in the lagging zones) that would lose purchasing capacity due to increases in prices of basic food staple. This happens because the poorest deciles of the samples tend to assign a larger proportion of their income to consumption expenditure (Engel Law). However, in another scenario (consisting of a substantial increase of the Bolivian exports as a result of the implementation of the DDP), Lara *et al* estimate that a redistributive effect would take place, that would benefit the poorest deciles. However, this result assumes that Bolivian exports would grow significantly, and have an expansive effect on the labour market that would mainly benefit the manufacturing and agricultural sectors.

In the case of Mexico, Nicita (2005) also used a combination of a macro-micro simulation approach. The macro model (GTAP) produced results on aggregated variables, while the micro model used percentage changes in the prices of goods and in the production factors to evaluate changes in family wellbeing (household utility function). The particularity of the Nicita's study was to concentrate on the transmission of prices. That is to say, when trade reforms are undertaken, they normally tend to generate changes in relative prices of goods and services of exchangeables (i.e., exportable and importable) at domestic level and in accordance with the geographic location. If these prices vary in a parallel with the international prices (in the domestic market), then there exists an effective transmission of prices. If the contrary occurs, the transmission of prices is weak, implying that the changes in international prices are not reflected in the domestic prices.

The transmission analysis also considers another dimension of geographic location. I.e., if the prices vary in urban zones in correspondence with variations in international prices, then there is a good price transmission; but if prices vary in remote zones with no correlation with the international prices, then there is a very weak transmission of prices. The findings of Nicita (2005) suggest that the effects of multilateral liberalization in Mexico, will probably not generate benefits for the majority of Mexican households, unless the trade policies are introduced along with compensatory (or complementary) policies that aim at facilitating the reaction capacity of the more vulnerable households to new market opportunities that emerge from trade reforms. A remarkable finding is that households geographically more connected to international markets and consumption centers (e.g., Northern States of Mexico neighbouring the United States) tend to have a larger price transmission and to capture larger benefits from trade reforms. The opposite occurs with the Southern States of Mexico neighbouring Central America (zones relatively remote and isolated from international markets where the price transmission is low), where families tend to not benefit from the trade reforms. Nicita (2005) concludes that an improvement in price transmission would contribute to materializing the benefits emerging from trade reforms in a more inclusive way covering most of the Mexican territory.

2. Final Considerations and Policy Implications

The papers above-discussed suggest that the effects that trade liberalization generate on the livelihoods of households living in lagging zones present some common characteristics as follows:

- 1) All use general equilibrium models to estimate changes in macroeconomic variables resulting from trade reforms. This is nothing new since such models are of standard use in the simulation studies of changes in trade policies.
- 2) Considering that these macro models are only capable of generating results in aggregated variables, the majority of the studies use micro simulation models to simulate the effects that the reforms would have on the livelihoods of households in a given region (mainly expenditure in goods and services and income coming from production factors). This process is known as combined use of macro-micro simulation. The micro simulation models may present different forms: utility functions, price indexes, econometric equations, etc. What is common among all the micro simulation models is that they try to answer the key question of how the processes of trade reforms affect the livelihoods of households from different social strata. It has to be pointed out that these models are only oriented towards the economic variables, setting aside the social and political variables that also affect households when the countries embark themselves in trade agreements of bilateral, regional or multilateral nature.

The empirical evidence gathered in the above-mentioned studies suggests that it is unlikely that trade reforms will produce

similar results in the different regions of the world, particularly when poverty is under scrutiny. This implies that trade reforms outcomes cannot be generalized and need to be evaluated on country by country basis. Even within country there are differences between families that make trade reforms affect them in different manners. These studies suggest that population segments from lagging zones do not necessarily benefit from trade reforms. This implies that governments have to make efforts to introduce, in parallel or subsequent to trade reforms, complementary or compensatory policy measures (that include policies to improve price transmission), if it is intended the benefits of international trade be more inclusive.

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